

Assignment3:

**Diary** as a research method

11/05/18

## Overview



Compared to other methods, such as surveys or interviews, the usage of diaries **has the advantage that users record events when they occur** (Carter and Mankoff, 2005).



This **reduces the risk of participants providing unreliable data**, since humans are often not able to accurately recall past events (Schacter, 1999).



On the other hand, filling in diaries **represents a distraction from the current task**, which can **affect the results recorded in diaries** (Czerwinski et al., 2004).



It is also challenging to keep participants as active diarists, so incentives are beneficial.

## Article 1:

# A Diary Study of Password Usage in Daily Life

## Aim

Two-week diary study examining how participants used passwords in their everyday lives, spanning the entire day, to give design input for authentication system designs.

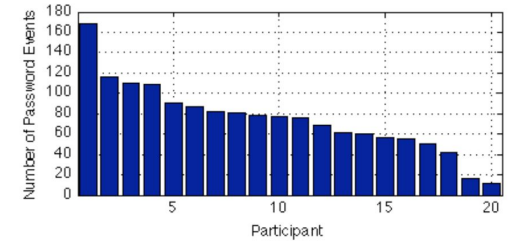
## How diary method is applied:

Recruited **20 participants**.

At the password events, the participants recorded contexts:

- 1- Participant's location
- 2- The purpose of the password event
- 3- Type of computer they were using (e.g., personal or public computer)
- 4- Whether they used a password aide (e.g., a sheet of paper with a list of passwords, or a piece of software to help with passwords).

At the end of the study, we asked participants to complete a **postsurvey**. We compensated participants **\$20 USD**.



**Figure 1** Distribution of password events across 20 users, sorted from most events to least. Most users accessed their accounts 40 to 110 times over a two-week study period.

**Table 2.** This table shows the number of accounts, number of password events, and mean number of events per account for each category. While email/messaging consisted of 19% of the accounts, it consisted of 40% of the password events.

Category	# of Events	# of Accounts	Events/Account
Email/Messaging	418 (40.4%)	33 (19.1%)	12.7
Online Community	165 (16.0%)	29 (16.7%)	5.7
University/Company	128 (12.4%)	17 (9.8%)	7.5
E-commerce	95 (9.2%)	35 (20.2%)	2.7
Portals	73 (7.1%)	10 (5.8%)	7.3
Applications	69 (6.7%)	16 (9.2%)	4.3
Finance	37 (3.6%)	14 (8.1%)	2.6
Others	49 (4.7%)	19 (11.0%)	2.6
Total	1034	173	6.0

**Table 5** The numbers denote the numbers of accounts in the categories. The rows denote types of password aids. The columns denote participants' self-evaluation of how concerned if someone obtains access to these account, 5 denotes *very concerned* and 1 denotes *not concerned at all*.

	5	4	3	2	1	Total
No using password aids	46	27	22	6	1	102 (60.3%)
Browsers' auto-fill features	21	5	12	10	2	50 (30.0%)
Writing down on paper	5	1	0	0	1	7 (4.1%)
Dedicated password manager	0	0	0	0	0	0 (0.0%)
Others	4	2	0	3	1	10 (5.9%)
Total	76	35	34	19	5	169

# Creative environments for design education and practice: A typology of creative spaces

To create a typology of creative spaces that is relevant to facilitating creative working and learning processes for designers

We recruited a total of 9 participants and handed each of them a set of identical cultural probes to complete within two weeks time.

#### 4- Pens & Snacks

After an initial data analysis, we invited each participant for an individual follow-up interview to answer emerging questions and to clarify reasons why respondents had marked certain spaces as positive or negative.

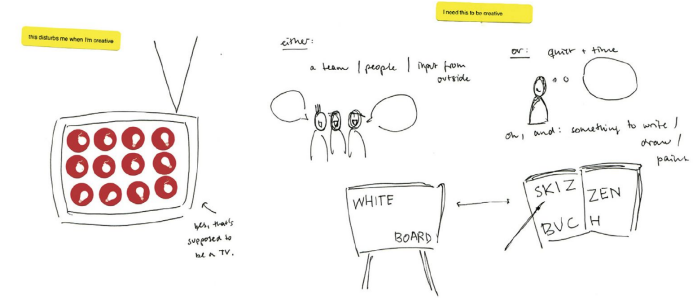
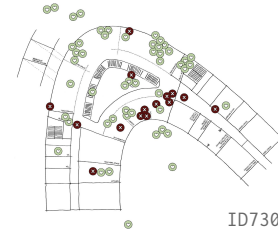


Figure 4 Selected pages from the diary of one participant: responses to the pre-printed prompts, 'this disturbs me when I'm creative' (left), and 'I need this to be creative' (right)



### Article 3:

## An Investigation of User Actions and Experiences when Exposed to YouTube Video Ads

### Aim

To research “*how does the user experience, when exposed to video ads, affect the user actions (decision to skip or watch an ad)?*”

### How diary method is applied:

- 1- We first **employed a survey** to assess the general opinion of YouTube users about the use of advertisements in the system.
- 2- Then, we employed a structured diary consisting of **a few multiple choice questions** and **some open questions**.
- 3- We asked users to add a new entry to this diary **whenever a video ad on YouTube was exhibited to them**.

The data gathered through the diary allowed us to analyze the individual experiences of users when exposed to video ads and their main motivations when deciding to skip or watch an advertisement. More importantly, a diary driven study allows us to **tap into user actions and experiences** based on their regular web navigation behavior (e.g., we do not remove them from their daily routine).

ID	Text
D1	What is your name?
D2	Device.
D3	Describe in a few words the content (YouTube video) you were watching.
D4	Why were you watching this content?
D5	Did you skip the advertisement?
D6	Describe in a few words why you skipped or not the advertisement.
D7	Do you know what was the advertisement about?
D8	If you answered 'Yes' to the previous question, please tell us what the advertisement was about.
D9	Do you think the advertisement was related to your personal interests?

Table 2: Diary questions.

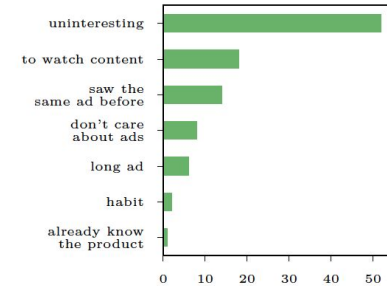


Figure 2: Histogram for the categories created through the open coding of question D6 (reasons to skip a video ad).

These findings motivate the need to develop ads that entertain and do not detract from the users' experience.

#### Article 4:

## Good morning, good day: A diary study on positive emotions, hope, and work engagement

### Aim

To look at the potential positive within-person relationships between positive emotions, work-related hope, and the three dimensions of work engagement on a daily level (i.e. vigor, dedication, and absorption).

### How diary method is applied:

- 1- An **online questionnaire study** was conducted among 113 employees (scientific or administrative staff) of a Dutch university.
- 2- The study respondents were asked by email for voluntary participation in a diary study.
- 3- The participants (56) were told that they had to fill out **a short questionnaire** in a booklet for **five consecutive working days** (Monday-Friday), twice a day: **before work** (after waking up), and **right after work**.
- 4- Every time participants were supposed to fill in the questionnaire, they received **a reminder via email or text message**, depending on their own preference
- 5- After receiving the completed diaries, participants were rewarded with a **50 Euro (about \$63)** voucher of their own choice.

An essential benefit of diary methods is that they permit the examination of reported events and experiences **in their natural habitat**, providing valid and reliable information about the affective and cognitive well-being of employees, complementary to that obtained by more traditional questionnaire designs

### Some of the diary questions

Right now I feel . . . at ease, energetic, happy, enthusiastic, and relaxed  
I felt like going to work today  
I am proud at the things I did at work today  
I was inspired by my work today

## Article 5:

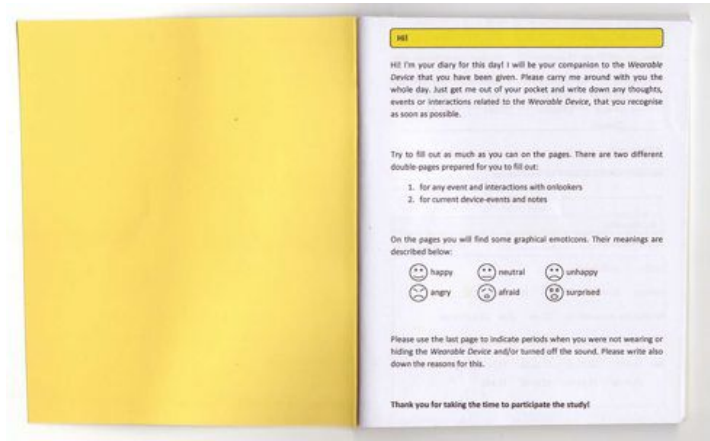
# Using Diaries for Evaluating Interactive Products: The Relevance of Form and Context

## Aim

To evaluate a wearable visualisation and sonification display, which represents live sensor-based information

## How diary method is applied:

- 1- **Five participants** (3 female, 2 male; age range 26-40; 4 students, one employee) took part in the 3 day evaluation study.
- 2- The diary was **iteratively refined** and **continuously tested** in several pilot test sessions
- 3- The diary was 14 by 9.5cm in size to fit into trouser pockets and handbags. This ergonomic design was crucial to allow participants to capture events in various circumstances and contexts.
- 4- The first page of the diary featured a welcome message and **basic instructions**
- 5- For each event we included a double page populated with questions to prompt responses. This included fields such as **time, location, and current activity** as well as information about the onlookers, such as their **behaviour**, and any interaction they had with the onlookers. **Emoticons** were included to identify the onlookers' reaction to the device
- 6- At the end of the 3-day evaluation period we conducted **interviews** with each participant. In these interviews the diaries were used to **prompt the participants' memory**



## **Preliminary ideas for my study:**

Medication non-adherence in chronic diseases

### **1- Questionnaire to recruit participants**

- Demographic info
- Medication use info (what kind of medication, for how long, have you ever skipped a medication dose)
- Willingness to participate in a diary study (Incentive?)

### **2- Diary study for 1-2 Week(s)**

- Once a day / Twice a day entries based on medication schedule  
**Or**
- Unscheduled signal contingent entries
- Could be a digital diary - (online form)
- Questions about their experience

### **3- Interviews**

- In depth questions about significant events that they recorded in their diaries



# References

## Articles

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